

factors in expanding the scope of our original rather restricted effort. Selwyn Roback of the Academy of Natural Sciences of Philadelphia arranged to have Cresson's type specimen sent to Riverside.

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A Preliminary List of the Sciomyzidae of California (Diptera)

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A survey of insects associated with land and fresh water mollusks has been in progress since 1962. This work is related to Agr. Exp. Sta. Project No. 2037 titled "Biological control of noxious land snails and slugs and aquatic snail hosts of livestock liverfluke." Attention has focused in particular on marsh flies whose larvae are known to feed on fresh water and terrestrial mollusks. Field and laboratory records to date show that associations with aquatic snails far exceed those with terrestrial mollusks. Since 1953, C. O. Berg, Cornell University, Ithaca, N. Y., and his students have published approximately 30 papers on the taxonomy and biology of certain North American species mainly from east of the Rocky Mountains, Central America, and Europe. Foote (1961) reported species collected in the northwestern United States. G. C. Steyskal, United States National Museum specialist in the family, has described many new taxa, and he has provided keys to the known

species in certain genera. Until the present survey there had been no intensive effort to establish the status of the Sciomyzidae in California. It is to partially fill this void and to answer increasing inquiries concerning marsh flies in California that the approximately 40 species collected thus far are herein reported.

Precise collecting data will be furnished by correspondence with interested solicitors. Only the counties are listed below. Sources of the specimens are Cornell University (CRNL), University of California—Berkeley, Davis, Riverside (UC-B, D, R), and United States National Museum (USNM). A single asterisk (*) indicates recognized species complexes or possible clinal entities. Determinations have been made by the author and R. E. Orth (Laboratory Technician III) and virtually all have been confirmed by G. C. Steyskal.

- Antichaeta robiginosa* Melander—Del Norte, Modoc (UCR, USNM)
Antichaeta testacea Melander—Modoc, Nevada, Orange, Riverside, San Luis Obispo, Santa Barbara, Santa Cruz (UCR, USNM)
Antichaeta n. sp.—Inyo, Mendocino, Modoc, Tulare (UCR)
Atrichomelina pubera (Locw)—Butte, Eldorado, Inyo, Lake, Lassen, Mendocino, Modoc, Nevada, Orange, Plumas, Riverside, Sacramento, San Bernardino, San Diego, Santa Clara, Siskiyou, Stanislaus, Tehama, Tulare (CRNL, UC-B-D-R, USNM)
Dictya montana Steyskal*—Del Norte, Humboldt, Imperial, Inyo, Los Angeles, Madera, Mendocino, Orange, Riverside, San Luis Obispo, San Bernardino, San Diego, San Mateo, Santa Barbara, Santa Clara, Ventura, Yolo (CRNL, UC-B-D-R)
Dictya texensis Curran—Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Ventura (CRNL, UCR)
Dictya n. sp. “B”—Nevada, Shasta, Trinity (UCR)
Elgiva connexa (Steyskal)—Mono (UCR)
Elgiva rufa (Panzer)—Modoc, Plumas, Siskiyou (UCR)
Hoplodictya spinicornis (Loew)*—Butte, Fresno, Inyo, Mendocino, Nevada, Orange, Riverside, San Diego, San Luis Obispo, Santa Barbara, Santa Clara, Shasta, Siskiyou, Tulare, Tuolumne, Yolo (CRNL, UC-B-D-R)
Limnia armipes Melander—Del Norte, Fresno, Mendocino, Marin, Nevada, Placer, Sonoma, Tuolumne (UCR)
Pherbellia humilis (Loew)—Butte, Humboldt, Imperial, Inyo, Lassen, Los Angeles, Mendocino, Modoc, Orange, Placer, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Santa Clara, Shasta, Siskiyou, Tulare, Yolo (CRNL, UC-B-D-R, USNM)
Pherbellia idahoensis Steyskal—Modoc, Santa Clara, Siskiyou (UCR, USNM)
Pherbellia nana (Fallen)—Butte, Del Norte, Eldorado, Inyo, Lake, Lassen, Mendocino, Modoc, Mono, Nevada, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Santa Clara, Shasta, Siskiyou, Tehama, Trinity, Tulare, Yolo (CRNL, UC-B-D-R)
Pherbellia oregonae Steyskal—Del Norte, Humboldt (UCR)

- Pherbellia schoenherri maculata* (Cresson)—Modoc, Mono, Nevada (CRNL, UCR)
- Pherbellia trabeculata* (Loew)—Orange, Riverside, San Diego (CRNL, UCR, USNM)
- Pherbellia vitalis* (Cresson)—Inyo, Lassen, Modoc, Orange, Placer, Riverside, San Bernardino, Santa Clara, Shasta, Siskiyou, Yolo (CRNL, UC-B-D-R, USNM)
- Pherbellia* n. spp. (4)—Mendocino, Placer, Plumas, Riverside, San Bernardino, Tuolumne (UCR)
- Pteromicra pectorosa* (Hendel)—Del Norte (UCR, USNM)
- Pteromicra siskiyouensis* Fisher and Orth—Modoc, Siskiyou (UCR)
- Sciomyza simplex* Fallen—Modoc, Siskiyou (UCR)
- Sciomyza* n. sp.—Modoc, Sonoma (UCR)
- Sepedon armipes* Loew*—Alpine, Inyo, Lassen, Modoc, Mono, Nevada, Plumas, Shasta, Siskiyou, Tehama (UC-B-D-R, USNM)
- Sepedon bifida* Steyskal—Butte, Fresno, Inyo, Mendocino, Monterey, Nevada, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Tulare, Ventura (CRNL, UC-B-D-R, USNM)
- Sepedon borealis* Steyskal*—Madera, Nevada, Plumas, Shasta, Tuolumne (UC-B-D-R, USNM)
- Sepedon praemiosa* Giglio-Tos—Butte, Colusa, Eldorado, Fresno, Inyo, Lake, Lassen, Los Angeles, Mendocino, Modoc, Mono, Napa, Navada, Orange, Plumas, Riverside, San Bernardino, San Diego, Santa Barbara, Santa Clara, Sacramento, Shasta, Sierra, Siskiyou, San Luis Obispo, Solano, Stanislaus, Tehama, Tulare, Ventura, Yolo, Yuba (CRNL, UC-B-D-R, USNM)
- Tetanocera ferruginea* Fallen—Mono (UCR)
- Tetanocera mesopora* Steyskal—Modoc (UCR)
- Tetanocera nanciae* Brimley—Alameda, Amador, Colusa, Eldorado, Inyo, Kern, Lassen, Marin, Mendocino, Modoc, Mono, Nevada, Plumas, Riverside, San Bernardino, Shasta, Sierra, Sonoma, Tuolumne, Yolo (CRNL, UC-B-D-R)
- Tetanocera obtusifibula* Melander—Marin, Santa Clara (USNM)
- Tetanocera plebeia* Loew—Plumas (UCR, USNM)
- Tetanocera robusta* Loew—Del Norte, Modoc (UCR)
- Tetanocera soror* Melander—Alpine, Nevada, Plumas, Sierra (UC-B-D-R)
- Tetanocera vicina* Macquart—Nevada, Placer, Siskiyou (UCR)
- Tetanocera* n. spp. (3)—Del Norte, Modoc, Mono, Plumas (UCR)

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